Data element Minimum range Accuracy 1 Resolution 1 ms. Pretensioner deployment, time 0 to 250 ms ..... ±2 ms ..... Pretensioner deployment, time 0 to 250 ms ..... +2 ms 1 ms to fire, right front passenger. Yes or No ..... Seat track position switch, N/A ..... Yes or No. foremost, status, driver. Seat track position switch. N/A Yes or No Yes or No foremost, status, right front passenger. Occupant size classification, 5th percentile female or larger N/A ..... Yes or No. driver. N/A ..... Occupant size classification. Yes or No. right front passenger. N/A ..... Yes or No. Occupant position classifica-Out of position ..... tion, driver. Occupant position classifica-Out of position ..... tion, right front passenger. N/A ..... Multi-event, number of event ... 1 or 2 ... 1 or 2.

TABLE III—REPORTED DATA ELEMENT FORMAT—Continued

0 to 5.0 sec .....

Yes or No .....

### § 563.9 Data capture.

The EDR must capture and record the data elements for events in accordance with the following conditions and circumstances:

Time from event 1 to 2 .....

Complete file recorded .

(a) In a frontal or side air bag deployment crash, capture and record the current deployment data, up to two events. The memory for each air bag deployment event must be locked to prevent any future overwriting of these data.

(b) In a deployment event that involves another type of deployable restraint (e.g., pretensioners, knee bolsters, pedestrian protection, etc.), or in a non-deployment event that meets the trigger threshold, capture and record the current non-deployment data, up to two events, subject to the following conditions:

(1) If an EDR non-volatile memory buffer void of previous-event data is available, the current non-deployment event data is recorded in the buffer.

(2) If an EDR non-volatile memory buffer void of previous-event data is not available, the manufacturer may choose either to overwrite the previous non-deployment event data with the current non-deployment event data, or not to record the current non-deployment event data.

(3) EDR buffers containing previous deployment-event data must not be overwritten by the current non-deployment event data.

0.1 sec

Yes or No.

[73 FR 2184, Jan. 14, 2008]

0.1 sec .....

N/A ....\_

EFFECTIVE DATE NOTE: At 76 FR 47489, Aug. 5, 2011, §563.9 was revised, effective October 4, 2011. For the convenience of the user, the revised text is set forth as follows:

#### § 563.9 Data capture.

The EDR must capture and record the data elements for events in accordance with the following conditions and circumstances:

(a) In a frontal air bag deployment crash, capture and record the current deployment data. In a side or side curtain/tube air bag deployment crash, where lateral delta-V is recorded by the EDR, capture and record the current deployment data. The memory for the air bag deployment event must be locked to prevent any future overwriting of the data.

(b) In an event that does not meet the criteria in §563.9(a), capture and record the current event data, up to two events, subject to the following conditions:

(1) If an EDR non-volatile memory buffer void of previous-event data is available, the current event data is recorded in the buffer.

(2) If an EDR non-volatile memory buffer void of previous-event data is not available, the manufacturer may choose to either overwrite any previous event data that does not deploy an air bag with the current event data, or to not record the current event data.

<sup>&</sup>lt;sup>1</sup> Accuracy requirement only applies within the range of the physical sensor. If measurements captured by a sensor exceed the design range of the sensor, the reported element must indicate when the measurement first exceeded the design range of the sensor.

(3) EDR buffers containing previous frontal, side, or side curtain/tube air bag deployment-event data must not be overwritten by the current event data.

## § 563.10 Crash test performance and survivability.

- (a) Each vehicle subject to the requirements of S5, S14.5, S15, or S17 of 49 CFR 571.208, Occupant crash protection, must comply with the requirements in subpart (c) of this section when tested according to S8, S16, and S18 of 49 CFR 571.208.
- (b) Each vehicle subject to the requirements of 49 CFR 571.214, Side impact protection, that meets a trigger threshold or has a frontal air bag deployment, must comply with the requirements of subpart (c) of this section when tested according to the conditions specified in 49 CFR 571.214 for a moving deformable barrier test.
- (c) The data elements required by \$563.7, except for the "Engine throttle, percent full," "engine RPM," and "service brake, on/off," must be recorded in the format specified by \$563.8, exist at the completion of the crash test, and be retrievable by the methodology specified by the vehicle manufacturer under \$563.12 for not less than 10 days after the test, and the complete data recorded element must read "yes" after the test.

#### § 563.11 Information in owner's manual.

(a) The owner's manual in each vehicle covered under this regulation must provide the following statement in English:

This vehicle is equipped with an event data recorder (EDR). The main purpose of an EDR is to record, in certain crash or near crash-like situations, such as an air bag deployment or hitting a road obstacle, data that will assist in understanding how a vehicle's systems performed. The EDR is designed to record data related to vehicle dynamics and safety systems for a short period of time, typically 30 seconds or less. The EDR in this vehicle is designed to record such data as:

- How various systems in your vehicle were operating:
- Whether or not the driver and passenger safety belts were buckled/fastened;
- How far (if at all) the driver was depressing the accelerator and/or brake pedal; and,
  - $\bullet$  How fast the vehicle was traveling.

These data can help provide a better understanding of the circumstances in which crashes and injuries occur. NOTE: EDR data are recorded by your vehicle only if a nontrivial crash situation occurs; no data are recorded by the EDR under normal driving conditions and no personal data (e.g., name, gender, age, and crash location) are recorded. However, other parties, such as law enforcement, could combine the EDR data with the type of personally identifying data routinely acquired during a crash investigation.

To read data recorded by an EDR, special equipment is required, and access to the vehicle or the EDR is needed. In addition to the vehicle manufacturer, other parties, such as law enforcement, that have the special equipment, can read the information if they have access to the vehicle or the EDR.

(b) The owner's manual may include additional information about the form, function, and capabilities of the EDR, in supplement to the required statement in \$563.11(a).

#### §563.12 Data retrieval tools.

Each manufacturer of a motor vehicle equipped with an EDR shall ensure by licensing agreement or other means that a tool(s) is commercially available that is capable of accessing and retrieving the data stored in the EDR that are required by this part. The tool(s) shall be commercially available not later than 90 days after the first sale of the motor vehicle for purposes other than resale.

# PART 564—REPLACEABLE LIGHT SOURCE INFORMATION (Eff. until 12-01-12)

Sec.

564.1 Scope.

564.2 Purposes.

564.3 Applicability.

564.4 Definitions.

564.5 Information filing; agency processing of filings.

APPENDIX A TO PART 564—INFORMATION TO BE SUBMITTED FOR REPLACEABLE LIGHT SOURCES

APPENDIX B TO PART 564—INFORMATION TO BE SUBMITTED FOR LONG LIFE REPLACEABLE LIGHT SOURCES OF LIMITED DEFINITION

AUTHORITY: 49 U.S.C. 322, 30111, 30115, 30117, 30166; delegation of authority at 49 CFR 1.50.

SOURCE: 58 FR 3860, Jan. 12, 1993, unless otherwise noted.